

Appendix G

Summary of the Superfund Program [1992-1994]

The Environmental Protection Agency (EPA) is committed to accelerating the pace of hazardous waste site cleanup. As part of this commitment the Agency has concluded construction activities at 237 National Priorities List (NPL) sites over fiscal years 1992-1994.

Implementation of the Superfund Accelerated Clean-up Model (SACM), the result of the 1991 30-Day Study Task Force¹ recommendations to streamline the activities in the clean-up process, changed the paradigm of doing business in Superfund. SACM allows for rapid reduction of risks at Superfund sites and restoration of the environment over the long term. SACM introduced significant improvements to the existing clean-up process by:

- eliminating sequential and duplicative studies as site assessment and investigation activities are combined;
- removing the existing overlap between the types of clean-up actions done under the Superfund removal program and those done under the remedial program, to save time and money; and
- redefining Superfund clean-up actions as early actions and long-term actions with complementary applications.

EPA Regions initiated SACM pilot projects during fiscal year 1992 to explore the benefits of the new clean-up model. The model implementation efforts continued through fiscal year 1993 to be fully operational in 1994.

¹ Superfund 30-Day Task Force Report; Accelerating Superfund Cleanups and Evaluating Risk at Superfund Sites. July 19, 1991.

The 30-Day Study Task Force also made a number of recommendations which have provided the framework for the continuous efforts to accelerate the pace of cleanup and streamline the Superfund program. Key recommendations implemented in fiscal year 1992 included:

- streamlining remedy planning, selection, and design;
- development of presumptive remedies, technology-based standards, and soil-trigger levels to standardize remedy planning and selection;
- shortening the remedy design phase for sites where the extent of remedial action cannot be readily determined;
- facilitate the resolution of site-specific issues that commonly cause delays in the clean-up process; and
- accelerating private party clean-ups.

The Agency also implemented measures to improve other aspects of the Superfund program:

- A National Superfund Director was appointed and the Superfund Revitalization Office created to strengthen program management and accountability, improve the effectiveness and efficiency of Superfund clean-up and administration, and ensure equity in Superfund enforcement.
- To better balance its environmental mission with effective contract management, the Agency

focused on improving contract management and accountability, eliminating excess contract capacity, controlling costs and securing quality work from contractors.

- A National Superfund Risk Management Workgroup was established to review Superfund risk assessment guidance and characterization practices, target areas needing improvement and coordination with other programs, and promote consistency in deciding the appropriate clean-up actions for sites.
- Demonstration of innovative treatment technologies and centralized access to information was designed to promote increased use of the technologies.
- New measures of Superfund progress and the development of informative publications enhanced public outreach and communications.

In fiscal year 1993, the Agency continued progress in improving the effectiveness of the program by further refining initiatives and identifying administrative changes that could be made within the existing statutory and regulatory framework. Continuing initiatives included preparing for full implementation of SACM and pilot projects to develop a single site assessment process and defining the role of the Regional decision teams. Other efforts included focusing resources on completing the evaluation and clean-up of sites, ensuring effective management of contracts and promoting consistency in assessing and managing risk. A special Superfund Administrative Improvements Task Force identified seventeen specific areas centered around four themes:

- Promoting enforcement fairness and reducing transaction costs;
- Enhancing clean-up effectiveness and consistency;
- Promoting increased community involvement and ensuring environmental justice; and
- Strengthening the role of the states.

Commencing in fiscal year 1993 and continuing on to 1994, the Agency successfully encouraged potentially responsible parties (PRPs) to undertake

and finance clean-up efforts at Superfund sites. By the end of fiscal year 1994, PRPs were leading more than 75 percent of remedial designs (RDs) and remedial actions (RAs) started during the fiscal year.

Fiscal year 1994 initiatives anticipated the reauthorization of the CERCLA taxing authority and an opportunity to propose revisions to other provisions of the statute. The Agency focused efforts on identifying possible legislative amendments that would improve the efficiency and equity of the program. The Agency solicited input from advisory committees, stakeholders, and Agency and inter-Agency work groups to draft proposed legislation. The focus of the proposed legislation was on enhancing community involvement, expanding the role of states, reforming the remedy selection process, pursuing liability reforms to reduce transaction costs and increase fairness and create a fund, the Environmental Insurance Resolution Fund, to resolve coverage disputes between PRPs and their insurers.

Working within the existing statutory and regulatory framework, the Agency also continued to implement the recommendations of the 1993 Superfund Administrative Improvements Task Force as well as on-going initiatives including implementing SACM, achieving construction completion at sites, strengthening contracts management, promoting enforcement first, accelerating clean-up at military bases slated for closure, promoting the development and use of innovative technologies, enhancing compliance monitoring, and improving the effectiveness of cost recovery. The Agency set and achieved a goal to implement most of the task force's recommendations by the end of fiscal year 1994.

The major areas of progress in the Superfund Program include: Site Evaluation, Removal, Remedial, Enforcement, Federal Facility Clean-ups and Superfund Program Support activities.

Site Evaluation

Over the past three fiscal years, 1992-1994, EPA's progress in identifying and assessing newly discovered sites has resulted in a total of over 38,300 sites identified in the CERCLA Information System (CERCLIS). CERCLIS is the Superfund inventory of potentially threatening hazardous waste sites.

Based on evaluation of 94 percent of the sites identified in CERCLIS for potential threats, EPA has determined that 1,355 of those sites should either be proposed to, listed on, or deleted from the NPL. To date, a total of 64 sites have been deleted from the NPL.

During the 1992-1994 time period the Agency has undertaken projects to address the technical complexities associated with both lead- and radionuclide-contaminated sites. The Integrated Exposure Uptake Biokinetic Model (IEUBK) and the Three City Lead Study have been used to assess lead contamination. The IEUBK model is a tool to aid the development of risk assessment procedures for lead contaminated soil. The Three City Lead Study will determine whether a reduction of lead in residential soil will result in a decrease of blood-lead levels in children exposed to the contaminant. To improve assessment of sites involving radionuclide contamination, EPA generates guidance documents for conducting assessments, conducts technology demonstrations and increases Headquarters assistance to the Regions.

Removal

To protect human health and the environment from immediate or near-term threats, the Agency and potentially responsible parties (PRPs) started nearly 1,000 removal actions and completed more than 870 during the fiscal years 1992-1994. More than 3,660 removal actions have been started and nearly 3,050 have been completed since the inception of the Superfund program.

Since 1992, the removal authority for "early actions," has been expanded to reduce immediate risks and expedite cleanup at NPL sites. The expansion was a key element of SACM. Early actions may include emergency, time-critical or non-time critical removal responses or quick remedial responses. By the end of 1994, EPA had piloted the early actions approach at 38 sites. Under the reportable quantities (RQ) regulatory program, the Agency promulgated final RQ adjustments for 62 hazardous substances and added 5 to the list. The Agency also continued to work on regulations to establish administrative reporting exemptions for naturally occurring radionuclide releases.

Remedial

Accomplishments during fiscal years 1992-1994 reflect the Agency's continued efforts to accelerate the overall pace of clean-up and complete clean-up activities at an increasing number of sites. During the period clean-up activities resulted in the placement of 217 additional NPL sites in the construction completion category for an overall total of 278 NPL sites in the category. Also started by the Agency or PRPs were nearly 220 remedial investigation/feasibility studies (RI/FSs), more than 410 remedial designs (RDs), and more than 350 remedial actions (RAs). The Agency signed 359 records of decision (RODs) at Fund-financed or PRP-financed sites.

Efforts to implement the 1991 30-Day Study continued during the 1992-1994 period and included development of presumptive remedies for municipal landfill, wood-treating, contaminated ground-water, solvent contaminated sites, and issuing policy for technical impracticability waivers. The Superfund Innovation Technology Evaluation Program and others designed to provide technical assistance, information and training were also encouraged for use at Superfund sites.

Towards the end of the period, the 1993 Administrative Improvements Task Force was a significant influence in the progress of remedial activities. The Agency:

- Demonstrated presumptive remedies developed for municipal landfills and sites contaminated with volatile organic compounds, while working to develop presumptive remedies for wood-treater, polychlorinated biphenyl, manufactured-gas-plant, grain storage, and polluted ground water sites;
- Released draft soil screening levels (SSLs) for 100 chemicals commonly found at Superfund sites;
- Implemented guidance for addressing Dense Non-Aqueous Phase Liquids (DNAPL) contamination of ground water and for invoking the technical impracticability waiver where performance standards cannot be achieved.

Enforcement

Accomplishments during the 1992-1994 period reflect the Agency's continuous commitment to maximize PRP involvement in financing and conducting cleanup and recovery of Superfund monies expended for response action. Over the three year period, the Agency has achieved enforcement agreements worth more than \$3.3 billion in PRP response work. Through its cost recovery effort, EPA achieved approximately \$676.6 million in settlements and collected more than \$570.3 million for reimbursement of Superfund expenditures. By the end of fiscal year 1994, the Agency has collected over \$5.7 million in CERCLA penalties.

The Agency has been working towards improving the efficiency and fairness of Superfund enforcement and through SACM, Administrative Improvements and promotion of "enforcement first" to secure PRP involvement in financing a significant goal has been to seek to reduce transaction costs. Over the three years *de minimis* settlements and most recently "de micromis" settlements have been encouraged as well as an increased use of alternative dispute resolution and increased use of mixed funding (EPA + PRP).

Federal Facility Clean-up

Federal departments and agencies are largely responsible for implementing CERCLA at Federal Facility sites. To ensure Federal Facility compliance with CERCLA requirements, EPA provides advice and assistance, oversees activities, and takes enforcement action where appropriate. At sites on the NPL, EPA must concur in remedy selection. By the end of fiscal year 1994 there were 1,945 Federal Facilities sites identified on the Federal Agency Hazardous Waste Compliance Docket. Of the sites on the docket, 160 were proposed to or listed on the NPL, including 150 final and 10 proposed sites.

During the 1992-1994 period the closure of military bases became an important issue. The President announced a Five-Point Plan in 1993 to accelerate the economic recovery of communities near military bases scheduled for closure. Through 1994 the Agency, in conjunction with the Department of Defense, states and local citizens, implemented the Fast Track Clean-up Program to expedite cleanup

and reuse of bases scheduled for closure. Guidance was issued that identified SACM components that provide opportunities for speeding cleanup.

Superfund Program Support

Through out 1992-1994, EPA has taken measures to enhance support activities in the Superfund program, including efforts to improve community relations, enhance public access to information, strengthen EPA's partnership with states and Indian tribes, and increase minority contractor utilization.

In its community involvement efforts, EPA tailors activities to the specific needs of individual communities and identifies ways to enhance community involvement efforts. The Agency emphasized the importance of effective community involvement in its administrative improvements and reauthorization efforts. The Agency also continued to provide technical outreach to communities, hold national conferences on community involvement, offer training and workshops, and facilitate community access to technical assistance grants (TAGs). To aid communities in obtaining technical assistance, EPA awarded 85 TAGs during the 1992-1994 fiscal years, bringing the total number of TAGs awarded since FY88 to 151, for a total worth more than \$8.6 million.

To enhance public access to Superfund information, the Agency continued its partnership with the National Technical Information Service (NTIS), which provides Superfund document distribution services. The Agency has expanded the Superfund document collection available through NTIS, continued outreach to inform the public of the services available, and began implementing a communications and outreach plan using NTIS services.

To support state and tribal involvement in the Superfund response activities, EPA has awarded nearly \$1.3 billion in cooperative agreements (CAs), including \$79 million awarded in FY94 through site-specific CAs.

Overall, EPA has granted Core Program CAs (CPCAs) worth nearly \$103 million in its continuing efforts to assist states and tribes in developing comprehensive Superfund programs.

To promote small and disadvantaged business participation in Superfund contracting, EPA, through direct and indirect procurement, awards contracts and subcontracts to minority contractors to perform Superfund work. Direct procurement involves any procurement activity in which EPA is a direct party to a contractual arrangement for supplies, services or construction. Under financial assistance programs (indirect procurement), EPA awards grants and/or cooperative agreements to states, local municipalities, universities, colleges, non-profit or profit-making institutions or firms, hospitals and individuals or otherwise known as recipients. This amount represents more than 4.3 percent of the total dollars obligated to finance Superfund work during the year.

Resource Estimates

Under Executive Order 12580, EPA is required to estimate the resources needed to implement Superfund. Since the enactment of CERCLA in 1980, Congress has provided Superfund with \$13.6 million in budget authority (FY81 through FY94).

Estimates of the long-term resources required to implement Superfund are based on the Outyear Liability Model (OLM). The OLM estimate of the cost of completing cleanup of current NPL sites is more than \$17.4 billion for FY95 and beyond, bringing the total estimated cost for the program to \$31.0 billion.